Docket No.: UMV-1474
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Gary J. Nabel, *et al.*

Application No.: 09/600766 Art Unit: 1636

Filed: July 21, 2000 Examiner: David Guzo

For: TARGETING OF GENE TRANSFER VECTORS TO CERTAIN CELL TYPES BY PSEUDOTYPING WITH VIRAL GLYCOPROTEIN

AMENDMENT AFTER FINAL ACTION

MS AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated May 2, 2003 (Paper No. 14), finally rejecting claims 1, 4-11, and 13-20, Applicants file this Response. Filed concurrently herewith is a Notice of Appeal. Entry of the below amendment and consideration of the remarks provided are respectfully requested.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 4 of this paper.

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A genetic construct comprising a gene operatively-linked to a carrier, wherein the carrier is associated with an Ebola transmembrane form of viral glycoprotein or derivative thereof, which is expressed on the surface of the carrier, wherein said viral glycoprotein or the derivative thereof retains the capability of targeting cell types which are naturally infected with Ebola virus.

2-3. **(Canceled)**

4. **(Original)** The genetic construct of Claim 1, wherein the carrier is a viral vector.

5. **(Original)** The genetic construct of Claim 1, wherein the carrier is a non-biologic gene targeting vehicle.

6. **(Original)** The genetic construct of Claim 4, wherein the viral vector is a retroviral vector.

7. **(Original)** The genetic construct of Claim 4, wherein the viral vector is a lentiviral vector.

8. **(Original)** The genetic construct of Claim 5, wherein the non-biologic gene targeting vehicle is a liposome.

9. **(Original)** The genetic construct of Claim 5, wherein the non-biologic gene targeting vehicle is a DNA-protein complex.

10. **(Currently Amended)** A method of targeting a gene to a cell comprising the step of administering to a cell population a genetic construct comprising the gene operatively-linked to a carrier, wherein the carrier is associated with an Ebola transmembrane form of viral glycoprotein

or derivative[[s]] thereof, wherein said viral glycoprotein or the derivative thereof retains the capability of targeting cell types which are naturally infected with Ebola virus.

11. **(Original)** The method of Claim 10, wherein the transmembrane form of viral glycoprotein or derivative thereof is expressed on the surface of the carrier.

12. **(Canceled)**

13. **(Original)** The method of Claim 10, wherein the carrier is a viral vector.

14. **(Original)** The method of Claim 10, wherein the step of administration is *ex vivo*.

15. **(Original)** The method of Claim 10, wherein the step of administration is *in vivo*.

16. **(Original)** The method of Claim 10, wherein the cell is an endothelial cell.

17. **(Original)** The method of Claim 10, wherein the cell is a hepatocyte.

18. **(Original)** The method of Claim 10, wherein the cell is a monocyte.

19. **(Original)** The method of Claim 10, wherein the cell is a dendritic cell.

20. **(Original)** The method of Claim 14, further comprising the step of introducing the cell population to a subject.